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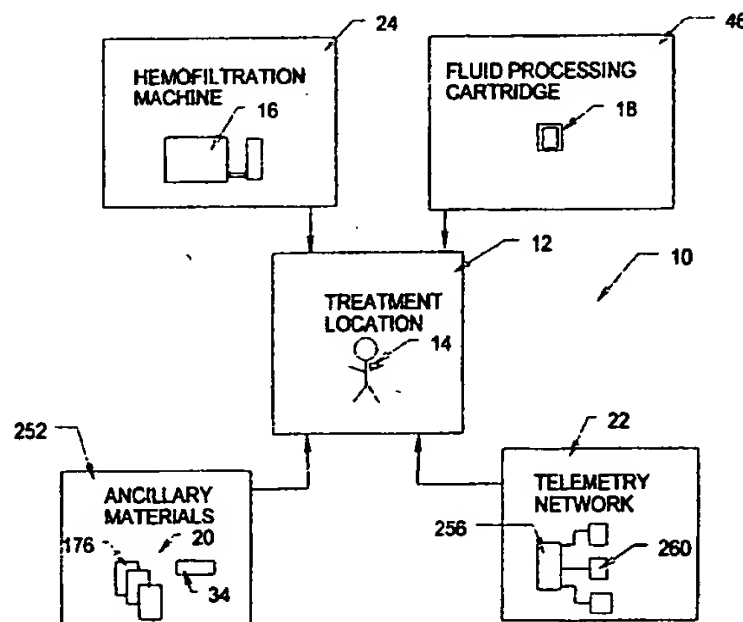
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- (54) Title: SYSTEMS AND METHODS FOR PERFORMING FREQUENT HEMOFILTRATION**



(57) Abstract: Systems and methods support frequent hemofiltration at a designated treatment location (14) to provide a durable hemofiltration machine (16) at the site, and provide a disposable extracorporeal fluid circuit (18) for installation on the machine. The systems and methods provide a replacement fluid for connection to the extracorporeal fluid circuit. The systems and methods instruct use of the hemofiltration machine, extracorporeal fluid circuit, and replacement fluid at the site. Hemofiltration is carried out by (i) operating the hemofiltration machine to convey an individual's blood through the extracorporeal fluid circuit to a hemofilter at a blood flow rate of at least 300 ml/min to remove waste fluid, (ii) operating the hemofiltration machine to return treated blood, after removal of waste fluid, to the individual, and (iii) operating the hemofiltration machine to supply replacement fluid through the circuit to the individual, and (iv) performing (i), (ii), and (iii) at least four times weekly.

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For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US00/42385

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : A61M 37/00, 1/14, 1/34, 1/36; B01D 35/00; C02F 9/00, 1/00

US CL : 604/4.01, 5.01, 6.09; 210/252, 256, 258, 650, 739, 929; 422/44

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : Please See Continuation Sheet

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

Please See Continuation Sheet

C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category * | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|---------------------|--|--|
| Y | US 4,494,950 A (FISCHELL) 22 January 1985, entire document. | 2, 3, 16, 17 |
| A | US 4,650,458 A (DAHLBERG et al.) 17 March 1987, entire document. | 1-22 |
| X U ---Y | US 5,762,805 A (TRUITT et al.) 09 June 1998, entire document. | 1, 4, 7, 8, 11-13, 15, 18 -----5, 6, 9, 10, 14, 19-22 |
| Y | US 5,863,421 A (PETER, Jr. et al.) 26 January 1999, entire document. | 1-22 |
| Y | US 5,871,465 A (VASKO) 16 February 1999, entire document. | 1-22 |

☐ Further documents are listed in the continuation of Box C.

☐ See patent family annex.

| Special categories of cited documents: | |
|---|--|
| "A" document defining the general state of the art which is not considered to be of particular relevance | "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention |
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| "O" document referring to an oral disclosure, use, exhibition or other means | "&" document member of the same patent family |
| "P" document published prior to the international filing date but later than the priority date claimed | |

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Continuation of B. FIELDS SEARCHED Item 1: 604/4.01, 5.01, 6.09, 5.02-5.04, 6.1, 6.11, 6.15, 6.16; 210/252, 256, 258, 650, 739, 929, 645-57, 651, 741, 767, 781-82, 793-94, 800-01, 805, 85, 87-90, 97-98, 103, 138-40, 253-257.2, 258-61, 269, 275, 282, 287-89, 302, 321.6, 321.71-.72, 322, 323.1, 348-49, 416.1, 418, 420, 424, 427, 428; 422/44, 48, 68.1, 82.13

Continuation of B. FIELDS SEARCHED Item 3: EAST filtration, blood, telemetry, network, remote system, modem, remote control, automated, authorization, replacement fluid